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AN

INAUGURAL DISSERTATION

ON

SPERMATORRHŒA:

PATHOLOGICALLY AND THERAPEUTICALLY CONSIDERED.

BY

WILLIAM EDWIN JOHNSTON.

PRESENTED TO THE MEDICAL FACULTY OF THE UNIVERSITY OF NEW YORK,

FOR THE DEGREE OF DOCTOR IN MEDICINE,

AT THE SESSION OF 1846-7.



American Thesis

NEW-YORK:
GEORGE F. NESBITT, STATIONER AND PRINTER,
CORNER WALL AND WATER STREETS.

1847.

IN THE YEAR OF THE

SPECIAL ATORRHGA:

THE UNIVERSITY OF THE STATE OF NEW YORK

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GENTLEMEN OF THE MEDICAL FACULTY :

In offering for your consideration the following Essay upon *Involuntary Seminal Discharges*, it seems proper that the writer should indicate, briefly, the reasons which have prompted him to the selection of this subject.

Several cases of more than ordinary interest have recently come under the writer's immediate observation, and the deplorable situation of these patients has made a most vivid and lasting impression upon his mind—an impression which has been mainly instrumental in giving birth to this effort of his pen. The devastations which this disease is carrying, unsuspected, through every vein of society; its insidiousness; the multiform and anomalous character of the symptoms which indicate it, and the comparatively little attention which has been given to the subject by the profession, are additional incentives to the execution of his design.

The writer asks for his *Thesis* a charitable reception at the hands of those whom he is proud to call his teachers, and from the profession at large he claims more attention to the subject of which he treats.

7 Vandewater-street, New-York :
December, 1846.

INVOLUNTARY SEMINAL DISCHARGES.

In all ages of the world, the passions have governed mankind. Passion holds in abeyance the will; and misery and degradation follow in its train. The instincts of animal life are imperative in their demands—they own no control when once they have gained the ascendancy over the individual; he fortifies himself but to yield;—and it is of the modifying, and in some instances, disastrous effects which these influences exert upon the health and endurance of the human organization, that I intend to speak in these pages.

A condition of disease so insidious and calamitous in its character to the mind and the physique, as the one which now occupies our attention, demands from the physician, not only the most profound professional research, but the warmest sympathies of his heart. It is the physician who comes in contact with *real* human suffering—suffering of which the world can have no knowledge. It is to him that the fountains of human misery are opened up, and at his feet are cast the hopes of the miserable invalid. To alleviate human suffering, and to bring back to life and energy the victim of a relentless and cruel disease, is a boon which the physician alone enjoys. Should not these considerations arouse him to a deep feeling of the responsibility which rests upon him, and to an appreciation of the position which he occupies?

I am about to speak of a disease which, more than all others, poisons the individual's whole existence; a disease which robs life of its enjoyment; which carries devastation into the very citadel of life; saps the energy; enfeebles the mind; which pales the cheek, blanches the lip, sinks the eye, exhausts the strength, and consigns ultimately to the tomb its miserable victim.

It is a condition of the system calculated to produce the most poignant suffering of which a human being can be susceptible; and it is so, because the seat of intellect is a principal sufferer; and because the brain

is painfully conscious of its own condition. Moreover, I have observed that men of sedentary habits and intellectual pursuits are more prone to this disease than those of a different class; and it is in these patients that the disease manifests itself in its more cruel forms. This class of patients have finer susceptibilities; they feel more keenly their deplorable situation; and this in-turning of the mind upon itself, only enhances the difficulty under which the individual is laboring.

Every infringement of the organic laws which regulate the functions of the body, is attended with a punishment corresponding to the magnitude of the offence committed; and it will be easy to see how an individual may become accessory to his own destruction by a want of proper attention in preserving the harmonious equilibrium of interior life;—thus the gastronome prepares the way for disease of the stomach by the constant irritation which he establishes in that organ from overloading it, or using indigestible food; the brain of every literary person is enfeebled by intense study, and thus rendered obnoxious to the attacks of those diseases which are known to be peculiar to that class of persons—apoplexy, cerebral congestions, etc.; aphonia will result from an undue exercise of the organs of the throat in public speaking; the liver gives away from the stimulation of the drunkard; the heart and the stomach too, are more particularly under the influence of strong emotion and exhausting melancholy,—and so on, with regard to all the functions of interior life.

And it will be remembered, that begin where you may, such is the order of dependence of one organ upon another, that the absence or undue performance of function of any *one*, introduces that disorder, which, unless timely arrested, involves in its fatal influence every other—destroys the cohesiveness of life—produces morbid sympathy—and then ultimately the organ dies, and involves its dependent organs and the whole economy in one common ruin.

It is barely possible that in some of these instances the brain may become disordered from constant mental excitement, independent of any direct morbid nervous influence; but it is under those circumstances where a morbidly abundant, powerful and constant irritability of the nervous system is directed upon the brain, that we witness those destructive changes which steadily and certainly unhinge the great powers of life, and terminate in the death of the individual.

I design keeping in view throughout these investigations some of those curious symptoms of disordered nervous action which is found so universally attendant upon these cases. The nervous system is a medium of communication every where distributed with the minutest care, and in the richest profusion; possessing its grand centre in the head. Not the minutest sensation occurs at the extremity of the system, without its being

instantaneously propagated to its centre; not a desire is excited in the mind, but a corresponding action is set up in the organ destined for its gratification; and the endless variety of communication with its several regions, by means of plexuses, ganglia, interlacing and decussation of fibres, separate twigs of intercourse, and the one agency of the great sympathetic nerve, show us what powerful influences may be brought to bear upon the brain by exalted morbid action. As we progress in our inquiries these morbid agencies will become strikingly apparent.

The disease designated by the term SPERMATORRHŒA, or Spermorrhœa, has received but little attention from the profession at large. The credit of having first brought this subject fully before the attention of physicians is due to the distinguished Professor of Surgery in the University of Montpellier, in France—M. Lallemand. The little work of Wickmann, with the commentaries of Sainte-Marie, its translator,* are all that we had upon this subject previous to the appearance of Lallemand's brief, but valuable book.† This book of the Montpellier Professor is made up almost exclusively of the details of cases which have come under his own observation; and in this consists mainly its value; for until he disclosed the true symptoms and pathological condition of this disease by autopsical demonstrations, but little was known concerning it. These investigations have developed many useful truths; and although our knowledge of the disease cannot be considered at all perfect, facts enough have been developed to assist us materially in tracing out its pathology and in directing our therapeutic means.

Spermatorrhœa is a term employed to specify a morbid or wasteful discharge of the fluids peculiar to the spermatic organs—taking place involuntarily. These seminal losses may arise from a blennorrhagic affection; from venereal excesses, either in coition or masturbation; from hæmorrhoids; from ascarides in the rectum; from metastases of cutaneous affections, and from mechanical obstructions in the rectum, which by producing pressure upon the prostrate gland and vesiculæ seminales during defecation, causes the expulsion of their fluids.

I shall speak of these discharges under two distinct forms: *diurnal* and *nocturnal pollutions*. And although these forms are sometimes blended, and run, imperceptibly, the one into the other, yet the distinction is a correct one, and must be observed for a proper comprehension of the subject. I shall proceed to define what is here meant by these two varieties of discharge.

* Dissertation upon Involuntary Diurnal Pollution, by Wickmann, translation of Sainte-Marie. Lyons, 1817.

† It is to be regretted that the English translation of this work has not received a more extensive circulation in this country. The book is hardly known to exist.

By nocturnal pollutions I mean those seminal discharges which take place spontaneously during sleep, either with or without erection or lascivious dreams. They arise from an undue excitation of the genital organs, either in masturbation or coition; most generally from the former. In a robust and continent individual, these discharges may not only be useful, but absolutely essential to the integrity of the nervous system; and it proves essential, by carrying off a stimulant which, if re-absorbed, would inevitably disturb the exercise of the nervous functions. That it does so; will be proven farther on in these pages. We see in these discharges a complete analogue to the epistaxis so common and useful in the young. As these nasal hemorrhages are nature's favorite method of blood-letting in plethoric youth, so in the other instance, are the nocturnal seminal discharges indicative of the same conservative principle of nature. This is further seen in hemorrhoidal fluxes, vicarious menstruation, and the conservative changes which take place in women after the "turn of life." How anxious does nature seem to preserve the individual from the attacks of disease, and how beautifully will she maintain herself when not controverted!

But these discharges may become excessive, and outlive the wants of the system. It is then that they become morbid and threaten to compromise the health of the individual. The irritation which has arisen from the presence of a super-abundance of the spermatic fluid, still persisting and increasing, the organs themselves begin to feel the pernicious effects of the over-excitement, and the erections now become incomplete, the ejaculations hurried, owing to the relaxed condition of the ejaculatory orifices, and the act is almost entirely devoid of pleasure. Soon the power of erection is entirely lost, the nocturnal discharges are diminished, and in some instances entirely suppressed, and the transition from the nocturnal to the diurnal form of the disease is accomplished. The inflammation has extended throughout the entire series of organs—they are relaxed—the ejaculatory ducts have lost tone—the spermatic fluids are secreted in a ratio proportioned to the increasing demand, and now every act of defecation and micturition is attended with a sensible loss of these fluids.

We have then the nocturnal merged into the diurnal form of discharges, bringing with them a prostrated condition of the individual's general health. And what are the symptoms now to be observed upon the patient indicative of this condition? He becomes lean, wan and dejected; wandering pains are felt throughout the whole body, but particularly in the head and region of the kidneys; a want of power will be felt to move with alacrity the lower extremities; digestion will be laboriously and painfully performed; the most obstinate constipation will be present;

flatuosities of the intestinal canal will continually torment and harrass the patient, driving him out of society; the lassitude and general debility which result from these conditions will induce a state of moroseness in the patient which renders him discontented with himself and others; he avoids society because of the restraints thrown around him; he becomes averse to every thing which reminds him of the pleasures in which he can no longer take a part; he falls into profound melancholy, becomes irascible, misanthropic, completely hypochondriac; occupied with one sole object, he manifests the greatest indifference for every thing that does not pertain to his own condition.

But it is to the cerebro-spinal axis we are to look for the gravest lesions, and here the destructive influence of the disease is more easily appreciated, although the pathological condition which establishes this change is unappreciable and shrouded in darkness. That the disease in question does make a profound morbid impression upon the nervous system through the medium of the cerebro-spinal axis, we *know*; but autopsical investigations aid us nothing in ascertaining that fact. So far as I am acquainted with it, the habits of the nervous system make against our discovering any organic changes in that system, as the result of disease: for, first, its changes are always produced in an exceedingly slow manner; and next, we are quite sure, that in other violent disorders of that system, it is often difficult, often impossible to discover the *influence of change*. It is, for instance, doubtful whether tetanus or hydrophobia produce any cognizable permanent change of structure: no definite lesion, such as we might expect to find, has ever been discovered. In apoplexy, sometimes a trace of disease is hardly to be found; and catalepsy shall have existed during a long life, and yet nothing be discoverable after death to indicate its existence. A patient shall have been subject to violent attacks of hysteria for twenty, thirty or forty years, and not the slightest visible influence be perceived in any part of the nervous system. Yet no one doubts the existence of these diseases, or of their being diseases of that system, because their effects are not discernible.

Returning to the symptoms which are presented by the brain and nervous system, we observe, first, that the elasticity and tension of the intellect are impaired—the power of application is diminished—the love of pursuit is decreased—the perception becomes slow, confused and erroneous—the wide range of imagination is curtailed and concentrated upon the one all-absorbing subject—the mind becomes old, if I may so speak, so that the memory of the immediate past is obliterated; while that of scenes and events long since passed, of by-gone days of happiness and mental hilarity, remains to harrass and torment the mind that would escape from its torturing and terrible thoughts; the judgment becomes infirm and va-

cillating; a horrible inclination to commit suicide is felt by the patient at the sight of instruments of death—a feeling rendered still more horrible by the ineffectual attempts which are made to flee from it; the grim monster Death stares him in the face at every slight turn of his disease, in all the hideous forms which a powerfully morbid and depraved imagination can invent; in fine, he has become a poor, miserable, debilitated hypochondriac, obnoxious to himself and a drag to his friends—without the courage to take his own life, or the power to contend with his disease.

Here, then, we have a picture of human suffering which calls for, as I have said before, not only the profoundest professional interest, but the warmest sympathies of our hearts.

It may be well to inquire under what aspect this disease generally presents itself to the physician for remedial treatment. An individual will experience after the subsidence of a protracted gonorrhœa, an unusual weakness of the genital organs, and a general prostration of bodily strength, for which he is unable to give any account. An anomalous train of symptoms will spring up, which give rise to endless and fruitless speculations concerning their true origin, and the patient will think himself menaced with apoplexy, cerebral congestions, (both of which do in some cases occur,) and an interminable train of diseases for the cure of which the entire materia medica is put under requisition; and without any avail. Neither physician or patient suspects, all this time, that there may be a lesion of the spermatic organs of sufficient magnitude to give rise to these nervous and other manifestations of the presence of disease. After a term of years of intense and unaccountable suffering, this patient dies, and the cadaver, if properly examined, discloses a chronic inflammation of the spermatic and urinary organs, which has extended gradually from the mucous membrane of the urethra to the vesiculæ seminales, the prostrate gland, the testes, the bladder, the ureters, and finally to the kidneys, producing the disorganization of all these parts, and the death of the individual. Now the great and prominent symptoms indicative of this condition, and those which should have been observed by the physician, would have been the constant discharge of badly elaborated semen from the urethral canal during defecation and the evacuation of the bladder, the state of the urine, which would have been found to contain considerable quantities of semen, the want of tone in the genital organs, and the presence, perhaps, of nocturnal pollutions also, although this latter symptom is rarely present in the advanced stages of the disease. From this extensive lesion of the genito-urinary organs flow those multitudinous and perplexing symptoms of which I have already spoken, and which are so admirably calculated to deceive the physician.

By far the greater number of cases which come under the observation

of the physician, result from an inflammation of the spermatic organs—occurring under the form of *diurnal* pollutions; yet he will meet with a goodly proportion of cases resulting from venereal excesses, abnormal conditions of the rectum, etc. And the reason why cases of this character are most frequently presented to us, is obviously, because the symptoms are mistaken for every thing else than those of the real disease. Cerebral congestions, threatened apoplexy, chronic gastritis, gastro-enteritis, palpitation and enlargement of the heart, vertigo, lumbago, gravel, venereal pains, ay, and phthisis pulmonalis—these are the diseases about which patients will seek medical advice, and for these, unfortunately, they are most frequently treated, without any knowledge or even suspicion of the real source of difficulty. On the other hand, patients afflicted with *nocturnal* pollution, arising, as they generally do, from masturbation or excesses in coition, are aware of the true cause of their disease, and hesitate to disclose it—preferring rather to rely upon their own resources than to publish their own shame. That these remarks are true, will at once strike every physician who is at all familiar with the subject. The members of the profession are constantly meeting with these unfortunate hypochondriacs, whose troubles about their *imaginary* diseases, are treated carelessly, *empirically*, and I will add, cruelly; because physicians ought to sympathize with, and especially cure them. The miserable dyspeptic, with his wan countenance and morbid susceptibilities—the hepatically demented, with his imaginary hypochondric and sub-scapular pains—the gormandizing victim of the lithic acid diathesis—the phthisicky worshipper of hoarhound candy—the “heart-smothered”—the mind-diseased believer in his own insanity—all these go to form a brilliant panoply to cover up our ignorance, and present a fine array of victims at whom to fire our batteries of bran bread, blue pill, potash, wood naphtha, digitalis, and—the *fundamental* application of leeches!

The *causes* which provoke seminal discharges are very various; and these are, unquestionably, the most important topics for our consideration. We seldom find a cause isolated; more frequently we have two or more causes combined, operating simultaneously or successively, and in which we cannot tell, from their combined mode of action, which was primary and which secondary. Bleorrhagia is, out of all proportion, the most frequent cause of these losses; and yet it is rarely found acting unaided by some antecedent or simultaneous subsidiary cause. This will be made apparent in the cases which follow. I may also remark that this latter is the most direct and energetic in its mode of action of all these causes. It is therefore more easily understood.

It is my design to introduce through the course of this essay, a few cases illustrative of the various prominent causes which go to establish

this peculiar condition of the system; and in doing so I will necessarily be obliged to rely upon other sources for a portion of these cases. A few instances have, indeed, as I before observed, fallen under my own observation; but in order to illustrate fully the views which I wish to establish, I must incorporate into my pathology, as I advance, cases which I find reported elsewhere. These will be taken principally from Lallemand, as his is the most accurate work with which I am acquainted, and the only one on which I can rely confidently.

BLENNORRHIAGIA, as being the most frequent, is the first cause of involuntary seminal discharges to which I shall direct attention. M. Lallemand's first case will illustrate admirably, many of the prominent symptoms which arise from these discharges.

Blennorrhagia—diurnal pollutions—symptoms of hypochondriasis, of chronic affections of the brain or its meninges—congestions of the head—death. Right kidney in a state of suppuration—prostatitis, almost destroyed—ejaculatory ducts isolated, frayed—vesiculae seminales diseased. Nothing remarkable in the other organs.

In the month of January 1824, I was called to M. de S. for symptoms of *cerebral congestion*, to which he had been frequently exposed for a long time. The following is what I learned from the numerous opinions of physicians that were sent me, and the detailed information that was added to them.

Born at Payerne, (Suisse,) issue of healthy parents, one of whom died suddenly with symptoms of *cerebral affection*. M. de S. of a robust constitution and an ardent imagination, received a careful education, and applied himself early to the solution of the most delicate questions of philosophy and metaphysics; at a later period, he became ardently occupied with ethics and policy.

After having passed some years at Paris, in the midst of his favorite pursuits, M. de S. was obliged to put himself at the head of a manufactory, and to become occupied with details that offended his pride. He became gradually pettish and suspicious; passing, without any known cause, from trifling gaiety to profound melancholy; easily affected by the slightest difficulties, without rejoicing in prosperous events; giving himself up with pleasure to ill-timed censure: in fine, he appeared disgusted and wearied with correspondence and calculations.

At this epoch he married. Dr. Butini, of Geneva, his physician and friend, wrote as follows upon this subject in a consultation:

"This marriage, with a woman of his choice, appeared to form a happier epoch in his life; but, very soon, the germs of the disease, which so many causes had assisted in producing, developed themselves rapidly. It was perceived that M. de S. wrote with slowness and difficulty; his style bore the impress of the decline of his faculties; he stammered and expressed imperfectly his ideas; he suffered from vertigo, at times sufficiently violent to make him fall; without, however, fainting or convulsions ever being superadded."

One day, as he was writing a very simple letter, he was seized by one of these *étourdissemens*, and could not finish it. This accident strongly alarmed the patient, and left a deep impression upon his family. It was attributed by the physician to a cerebral congestion which had produced a *weakness of the right side of the body*. Twenty leeches were applied to the anus, and the danger appeared to be removed.

However, analogous phenomena having been repeated at Geneva and at Montpellier, they consulted, anew, Dr. Butini, the professors, Baines, Fages, and other distinguished practitioners: some, struck with the misanthropic irascibility of the patient, with his passion for solitude, &c., regarded the affection as purely hypochondriac or nervous; others, dwelling upon the derangement of the digestive organs, thought of a chronic affection of the liver: but the greatest number believed it to be an organic disease of the brain or of its membranes; a chronic encephalitis or meningitis, owing to an hereditary predisposition.

In these different consultations they were agreed upon the necessity of withdrawing the patient from all serious occupation: upon the utility of travelling, diversion, and regimen; upon the importance of keeping the bowels open by enemata and purgatives: the greater part advised *frequent application of leeches to the anus*, with milk diet, &c.; some proposed assafoetida, baths and pills of camphor. These means produced no evident amendment: the leeches weakened him; milk diet deranged the stomach; constipation became obstinate. Cold baths by immersion, cold affusions upon the head, calmed the insupportable spasms that the patient experienced in the legs, thighs and face: the waters of Aix in Savoy and the *douches Ecossaises* appeared also to produce some amelioration.

However, the patient became gradually more irascible, and at the same time more insensible: his moments of passion more frequent and violent, and he showed more indifference for things and persons whom he had most loved. The weakness of the limbs

increased, to the point of producing frequent falls upon the most level ground. His nights became agitated; sleep lighter, often interrupted by nervous tremblings or acute pains, accompanied with cramps and with throwing of the head backwards.

The cerebral congestions increased: fear of an imminent apoplexy made him recur to new applications of leeches to the anus, to bleedings from the foot, to frictions with antimonial ointment, to blisters, to sinapised pediluvia, and to the application of ice upon the head.

Notwithstanding the employment of these energetic and multiplied means, there came on a new and violent congestion; it was then that I was called. Here is what I remarked:

The patient was restless, agitated, incapable of remaining two minutes in the same place; his countenance was red, his eyes prominent, injected, fixed and wild; his physiognomy bore the impress of profound fright; his gait was unsteady; his limbs bent under the weight of the body; his skin was cold, his pulse small and slow.

These last circumstances struck me less than those upon which my attention had been directed by all that I had just learned, and I also advised leeches to the anus. Immediately M. de S. became violently angry, and assured me that leeches had *always weakened without ever helping him*. I was too much pre-occupied with the danger of an apoplexy, to be arrested by this profound conviction, manifested with so much energy, and I had six leeches applied to the neck.

The following day, I found the patient very pale, and so much weakened that he could not go out, which threw him into a state of despair, for he could not remain in any one place. There came on an oedematous swelling of the right parotid and of the cheek, which was replaced on the following day by a similar state of the foot and left leg.

Rest and repose became indispensable; the patient was deeply affected by it, and told me *with tears in his eyes*, that he was going to lose his appetite, and would no more be able to go to stool. I learned then, that, notwithstanding repeated falls, he was tormented with a desire to walk and to change his position: that his abdomen was habitually distended and meteorised; that he took many enemata and purgatives to combat an obstinate constipation; in fine, that his *promenades* and his *stools* had become the only objects of his thoughts and conversation.

Having observed analogous phenomena in almost all the individuals affected with diurnal pollution, I made new inquiries with regard to that attack, in which they thought that the *right side* had been affected, and I assured myself very soon that it was the ideas that had failed, and not the movements of the hand that held the pen: the two halves of the body had in reality preserved an equal energy.

Struck with the remark of Dr. Batini, concerning the progress of the disease after marriage, I addressed myself to Madame de S., and I learned that in fact the character of her husband had become peevish, irascible, and meddlesome; which had made his relations suppose that he was unhappy in his family. I began then to believe that we had been deceived as to the true cause of all the symptoms observed during seven or eight years, and I recommended them to preserve the urine of the patient, in order to show it to me the next day.

Its aspect alone proved to me that I had divined justly: it was troubled, thick, of a fetid and nauseous odour, similar to water in which anatomical preparations have remained a long time in maceration. In decanting it slowly, I saw flow out a fleecy cloud like a very thick decoction of barley; a glairy, ropy and greenish matter remained strongly adherent to the bottom of the vessel; in fine, some thick globules, yellowish-white and not adherent, were mingled with this sediment like drops of pus. I remained convinced from that time, that there existed, not only a seminal loss, but also a chronic inflammation of the prostate, and a suppuration of the kidneys.

I imparted my opinion to Madame de S., which surprised her much: I obtained from her the following particulars: she had always thought that her husband was naturally *very cold*; as well as she could judge, he had never committed any excess with her, and nothing inclined her to suspect his conjugal fidelity; coition had always been so rapid, and she had taken so little part in it, that she could not conceive how she could have become a mother; gradually all intercourse had become of very rare occurrence; it had even entirely ceased for the last three years. These hints confirmed me more and more in my opinion; but they were still incomplete.

Notwithstanding the state of the intellectual functions of M. de S., I was able, at a favorable moment, to obtain from him some information that had never been demanded of him. Having lost his way in a botanical excursion, in the environs of Geneva, he found himself alone, with a shepherdess, who had left her flock to show him his way. He was 16 years of age, and was just leaving college. Some days after, there came on a blennorrhagic discharge; he concealed it carefully, and succeeded in curing it by the simple use of cooling drinks. The following year the discharge re-appeared and was arrested by astringents. Two years after, having drunk a great quantity of beer in the heat of summer, he saw it make its appearance anew; in fine it returned again during a long journey that he made on horseback. Since then, M. de S. had felt but little inclination for women, and deprived himself of their society without difficulty.

Fully convinced, after the relation of all these circumstances, I explained to M. de S. the nature of his disease. He would not believe it; but he promised to watch himself. The next day, he took me aside and told me that in fact the last drops of urine were viscous, and that in going to stool, he had collected the hollow of his hand full of similar matter. (*Iced milk, &c.*)

Eight days after, there came on a new cerebral congestion, in consequence of which the respiration became stertorous, the skin of an icy coldness, the pulse imperceptible; the patient fell into a kind of syncope, which was followed by speedy death.

I abridge the post-mortem details:

In the *brain* were found some bubbles of air and several spoonfuls of limpid serosity; the substance of the brain softened throughout, and more or less injected. In the *thorax* the pulmonary pleura was found every where adherent to the costal pleura; lungs crepitant and pale; heart healthy. *Abdomen* green, meteorized, emitting a strong odor; the intestinal mucous membrane thin, supple, of a slate gray color, and distended with gases. Left *kidney* healthy; the right a third larger, adherent to the surrounding parts by a dense, fibrous, and very strong cellular tissue, containing in its parenchyma about forty small abscesses, varying from the size of a pea to that of a walnut; the tissue of the kidney reduced in four-fifths of its extent, into a dense, coriaceous membrane filled with thick septa, fibrous, and somewhat of a violet color; internal membrane of the pelvis red, villous; ureter thin, distended, brownish, very much injected on its internal surface. *Bladder* contained a quart of transparent urine; its walls thin and degenerated. Left *vesicula seminalis* small, brown; the right separated from the corresponding vas deferens, folded upon the posterior border of the prostate, and, as it were, united; surrounded by a dense fibrous tissue, and difficult to dissect. *Prostate* projecting three or four lines behind the neck of the bladder, to the extent of an inch and a half in surface; twice its ordinary volume, pressing upon the rectum; hard upon the lateral parts of the neck of the bladder, soft in its middle part; a stroke of the scalpel having divided its fibrous envelope, there flows from it a purulent matter, thick, opaque, stringy, and elastic, similar to pus in color, and to the nasal mucus in consistency. The canal of the urethra being split, an infinity of filaments which are inserted into as many little holes, are seen coming out from the openings of the mucous follicles of the prostate. The *orifices of the ejaculatory ducts*, instead of being circular and mammary, form an elongated, ragged slit, especially on the side towards the bladder; two stiletts introduced by the *vasa deferentia*, although quite large, pass out easily by these openings; the ducts are small and thin, and, as it were, dissected; the posterior border of the prostate is not yet destroyed, but it is pale, flaccid, easy to tear, as well as the parts in the neighborhood of the principal disease; an unctuous and puriform matter may be pressed out as through long tubes. Toward a small, flaccid and pale. Urethral canal intact.

It will at once be admitted that the lesions of the genito-urinary organs disclosed by the autopsy, were abundantly adequate to the production of all the symptoms observed in this patient during life; and that these lesions were capable of producing death by their own influence, and that exerted by them through morbid changes on more important organs.

The regularity which the inflammation observed in its march through the various organs, and the corresponding symptoms which were developed, are worthy of remark. Gonorrhœa laid the foundation, *in limine*, for all the succeeding trouble. This was the starting point—the match which fired the train; and the catenation of destructive attacks which were subsequently made, terminated in death. The prostate gland, the ejaculatory ducts, the vesiculæ seminales, were successively involved in the inflammation. Serious general disturbance of the patient's health, aberrations in the cerebral functions, and certain pathognomonic symptoms indicative of spermorrhœal discharges, now declared themselves. The patient marries, and all the symptoms are aggravated. There is a sad deterioration of the virile powers; the ejaculations are hurried; the erections are incomplete, because the semen is expelled as fast as it is secreted—*guttatim*, I may say, and the *manly* stimulus is therefore wanting; further, the loss is great in amount, because the testicles, owing to their irritable condition, secrete more than their ordinary quantum of fluid.

The urinary organs eventually became involved in the difficulty: by referring back, it will be seen that there not only existed an inflammation of the spermatæ organs, determining a seminal loss, but also a chronic inflam-

mation of the prostrate, and a suppuration of the kidneys; and hence the peculiar character of the urine. This is a point of more than ordinary interest to the profession, since it is this peculiar character of the urine which has given to empirics so wide a field for lucrative employment.* The right kidney was found extensively diseased; but I cannot concede what M. Lallemand asserts, that the kidney was the last organ involved; and I infer so because pain in this region is one of the first symptoms present in spermorrhœa, and because abundant analogy proves that an irritation at one point, may, by nervous sympathy, establish disease at another. What do we observe in the various phenomena presented by spinal irritation? A slight point of irritation established in a motor nerve of the stomach, will be at once referred to its origin in the spinal axis; disease of the medullary substance follows, and the corresponding sensitive branch feels, and conveys to its extremity this diseased condition; and through the influence of this reflex action a profoundly disordered condition of the functions of the stomach may be established. Every set of organs in the human body destined for a combined or a subsidiary action—an action having in view a common end—no matter how remote they may be from each other, are known to be intimately connected by nervous sympathy:—as, for instance, the mammary glands and the uterus; certain secretory organs—the testes and the parotids, etc. Moreover, the kidney would not be likely to be so extensively diseased, if it was the last organ attacked: for taking as data the length of time it required for the other organs to take on this condition, the plausibility of this proposition will be obvious. I infer, therefore, that the pain and weakness which is felt in the lumbar region early in the disease, arises from the irritation in the lower part of the urinary organs, and that this irritation may, as in other instances, exert a morbid influence upon the kidney which shall not only pre-dispose that organ to inflammation, but actually establish disease there, before the inflammation can have reached it by the long and slow route through the ureters.

I would gladly enter farther into an examination of the pathological facts developed by the case of M. de S., for they are all exceedingly interesting, and of the most essential value to the physician; but my limits

* A young friend of mine in this city, of fine constitution, discovered in his urine one day, a flocculent, opaque sediment, which had settled to the bottom of the vessel in which he had made his water; and he had felt for some time, considerable pain in the region of the kidneys, together with more or less of general constitutional disturbance. He was at once alarmed; and believing that these were phlegmatic discharges he hastened to lay his case before a gentleman of this city renowned as a "gravel-curer;" the diagnosis was, of course, in accordance with the young man's apprehensions. He subjected himself to a course of treatment during a period of eighteen months, which could be compared to nothing short of the pagan's penitential sacrifices, and without any amelioration in his condition. I prevailed upon him finally to discard the empires and his medicines; he married, was circumcised in his conjugal enjoyments, and being of a good constitution, and by using some tonic medicines, he is now, two years after marriage, a healthy man. There was not the least doubt in my mind that this person was suffering from seminal losses. His previous habits pre-disposed him to an inflammation of the spermatic organs, and an examination of the urinary precipitation, proved to me the true character of the disease. How many hundreds are there, like him, victims to the empiricism of the age

do not permit. Suffice it, that the final analysis leads us back to the blennorrhagia contracted twenty years before death, as the primary and efficient cause of the whole difficulty which succeeded.

In conclusion, this case teaches us a valuable lesson in diagnosis.

The following interesting case came under my own observation. Many of the symptoms were new and striking, and I became therefore zealously enlisted in ascertaining the true pathological condition of the patient. There are some points of particular interest in this case, which present, to my mind, powerful inducements for extending our investigations farther into the pathology of the disease.

Masturbation—Excesses in coition—Abundant nocturnal emissions—Then diurnal emissions—Great prostration—Epilepsy—Profound hypochondriacism—Disposition to commit suicide—Cauterization—Strict hygienic course—Cure.

C. C., æ. 22, of a sanguino-nervous temperament, good constitution and robust health, contracted, at the age of 13, while at college, the habit of masturbation, which he continued until about seventeen. At this time he went to reside in the city, to enter into commercial pursuits, and having discovered that the pernicious habit of which he was guilty was likely to prove prejudicial to his health, he discontinued it entirely. But soon, however, his continence produced such an exaltation of the venereal desires, (owing to the retained semen, which, seeking its natural channel, was secreted in excess,) that nature was obliged to relieve herself, and in consequence his nocturnal emissions became more frequent and annoying; and he found it quite convenient, at the same time, to supply himself with a mistress.

For two years he indulged wildly in these excesses, and gradually and steadily his health and strength failed. Habit, and cultivated and ungovernable desires urged him on; the power of resistance was diminished; but then he no longer found pleasure in the embrace of his mistress. The periods of intercourse became lengthened, less and less attended with pleasure, and finally really burthensome. He became disgusted, and cast her off.

Diurnal pollutions now manifested themselves, attended also with an occasional nocturnal emission. Great prostration of his physical powers gradually supervened; he went on from bad to worse, when one day, after a longer than usual suspension of seminal discharges, he fell into an epileptic fit, which lasted but for a few moments. He was justly alarmed at his condition, and became more cautious about his health. The multitudinous and varied pains which constantly annoyed him, the seriously altered state of his health, and the fear of epilepsy, had the effect of throwing him into a profound state of hypochondriasis. The shock which the nervous system had felt from these diversified influences was more than it could bear with impunity.

He had used various remedies for the usual diseases under which these persons are thought to be laboring, and he now came to me, to tell me what he had not disclosed before,—the whole history of his life, in order to obtain my advice. I became deeply interested in his case, and zealously set about a thorough examination of his condition. I found most of the symptoms present corresponding so closely to those laid down by M. Lallemand, that I was at once convinced that seminal losses was the primary and efficient cause of all his trouble. Constipation, which was only relieved by cathartic medicine; itchings of the anus, unattended with dartrous eruptions or parasites; pain in the head; vertigo; ringing in the ears; lassitude; palpitation of the heart; he was incessantly annoyed with flatulence; face and head flushed with blood; digestion destroyed in a great measure; appetite uncontrollable; an intermittent, burning pain in the stomach; lower limbs weak, and scarcely capable of supporting his body; the intellect was disturbed, the power of fixing the attention destroyed; he was keenly acute in all things concerning his disease, but obtuse on other subjects; he was timid, and his countenance betrayed much agitation when spoken to; was easily chilled by cold, or on the contrary suffused with perspiration—the transition being rapid and from the most trivial alternations of temperature or exercise; there was a constant exudation of glairy mucous from the orifice of the urethra when venereally excited; he urinated often, the few last drops being lost in his pantaloons, indicating deficient action in the sphincter; the last portions of the urine were white, and he lost a similar substance also during, or after defecation.—Most of these symptoms are always present in seminal losses.

But the symptoms to which I would direct especial attention, are these: After a few days' indulgence in coition, or more than a usual number of nocturnal pollutions, and then a few days of total abstinence; or when from some cause the discharges had been suppressed for a few days, and, of course, there was a great accumulation of semen, there was an augmentation of the lumbar pain, a greater disposition to nervousness, a greater depression of spirits, a stronger impulse to commit suicide:—*and it was on an occasion like this that epilepsy seized him.* What is the conclusion? Obviously this, that the absorption into the system of the abundantly secreted and badly elaborated fluid is capable of producing an irritable and morbid state of the nervous system,—such a state as we have seen manifested in this young man. I recollect hearing Professor Mott, in endeavoring to ascertain the cause of a case of epilepsy which came before him, propound the following questions. The patient was a man, æ. 24, and the convulsions had attacked him four years previously. Have you ever been in the habit of masturbating?—No. Wasn't you subject

to nocturnal emissions, supervening upon lascivious dreams?—No. Were you not in the habit of enjoying venereal pleasures to excess?—No. Did you not have a great deal of intercourse with females, at parties, in private, &c.?—Yes. And were not your amorous desires easily excited by such intercourse, and did you not feel an almost uncontrollable desire to enjoy their persons?—Yes. And did not this excitement, after your return to your bed, produce an involuntary erection, and an emission of semen?—No. Here, then, is an instance (rare, it is true) where the super-abundant secretion was absorbed, rather than excreted by the ordinary way. Now I conceive there is as much harm done to the nervous system by this absorption, as by the voluntary abuse of the venereal organs. The secretory process is stimulated into powerful action by the constant amorous excitement that is maintained, semen is deposited in large quantities in answer to this call of the mind, and being retained instead of discharged, it is absorbed and again carried into the circulation, producing, if long continued, (in connection with the diseased condition of the spermatogenic organs,) highly disastrous consequences to the nervous system; and by the mysterious and unaccountable sympathies which are known to exist in this system, develops itself in the brain, and in the medulla spinalis, in the form of chorea, epilepsy, ramollissement, tabes dorsalis, and so on. There are but few men who do not have occasional emissions; and I believe, as I have before stated, that robust, plethoric men, who are mixing much in female society, especially, should have these emissions to carry off the super-abundant fluid. They are nature's tappings, and so long as they are not too abundant, are salutary.

Physiologists say that the absorption of the semen in the youth who has attained the period of puberty, is the developing stimulus of the man: giving growth to the hair, strength to the voice, firmness to the limbs, and boldness to the countenance. There is languor *post coitum*—the bull is brave—the eunuch is effeminate; and this absorbing process may be the cause, though I cannot concede that it is necessarily so. There is no analogous process to it in the system.—where a fluid is secreted (for some other specific purpose) to be absorbed again. But where the spermatogenic organs are functionally deranged by disease, the fluid super-abundant, and, of course, badly elaborated, unhealthy, we can easily see how a serious shock may be impressed upon the nervous system. It is therefore evident that seminal losses make their great impression upon the nervous system. A change is brought about in the condition of the nerves of the venereal organs—a point of irritation is established in the nervous circle—to use a figure, there is an obstruction in the course of the orbit which disturbs the equanimity of the planetary motions; its equilibrium is destroyed—the harmony of its action is broken in upon; and disease will

result precisely upon the same principle as does tetanus from a punctured wound of the foot, or neuralgia from the cicatrix of phlebotomy ;—the difference being only this—that in one instance there is disordered function, perhaps partial disorganization of the nerves of the part, and in the other complete strangulation. There is a habit established by the constant access of fluid to the spermatie organs, by which the susceptibility of the nerves is heightened and goes on increasing *pari passu* with the access of the secretion, until finally the slightest source of irritation applied to any part of the system is rapidly diffused by the agency of these, now willing cords, to all parts of the frame. In fine, I repeat that seminal losses exert their influence essentially upon the nervous system—it is a nervous disease, and it is no stretch of the imagination to conceive how epilepsy, chorea sancti viti, ramollissement, apoplexy, insanity, idiocy and other affections of the cerebro-spinal system may arise from it.*

To return from this digression: C. C. had a horror of suicide, and yet an evil genius seemed always urging him to it; the sight of pointed bodies, of cutting instruments and fire arms, made him tremble, and caused in him a desire to kill, which he could only get rid of by subjecting himself to some acute pain; by pinching, for example, strongly some part of his body. The feeling manner in which he depicted his sufferings from this cause was calculated to awaken the deepest sympathies. Buried in his melancholy thoughts, and stepping aside from a communion with his fellow-men, he brooded in silence over the fear of suicide on the one hand, and death from some of his other ailments on the other. Can any condition of the human mind be more pitiable, more desolate than this? There is a mysterious and unaccountable propensity for imitation—an unconquerable inclination to commit some dreadful crime, which we see manifested in certain individuals, mostly those of a nervous or sensitive temperament, that is to me peculiarly interesting. It is a fact too well established for denial, that murders and suicides *are* sometimes perpetrated under the influence of this curious hallucination; and a question of law might very properly arise as to how far a man is amenable to the law for the commission of a criminal offence while in this condition. We are informed that the trial of Henriette Cornier, in France, for infanticide—it becoming, from its peculiar, and deeply exciting circumstances, a subject of very general attention and conversation—occasioned in many respectable females a strong propensity to the same unnatural deed. The repeated attempts on the lives of Louis Phillippe and Queen Victo-

* A case in point recurs to memory, which I saw in the City Hospital two years ago. A boy, aged 10, who had been laboring under chorea sancti viti for two months, attended with dry cough and great nervous excitability, presented himself for treatment. He was put upon the use of the different remedies employed for three months, successively, without any improvement for three months; when it was discovered that he was in the daily habit of masturbating—the cause which had, no doubt, produced the disease, and which now evidently maintained it in opposition to the remedies employed. His penis was blistered, to prevent farther manipulations, and he got well.

ria, must be in part dependent upon this inclination to imitation; and we find on record an abundance of instances further illustrative of this propensity. We read of mothers and nurses who have had such an ungovernable desire to destroy the child which they were nursing, that they have voluntarily begged that they might be tied or imprisoned to prevent their doing harm. This feeling of imitation is unquestionably engendered in many instances by reading public notices of suicides, infanticides, rapes, and so on; and this conviction has induced me on former occasions to oppose, in the public prints, the avidity which is manifested by those having in charge the press to seize upon every instance within reach, and to dwell with nice prolixity upon all the horrid details of the case. Such publications not only do harm by creating perversions of the natural channels of thought and action, but they serve to pamper a morbid, depraved taste which exists in every community, for all that is horrible and indicative of man's depravity.

In pursuing the history of C. C. I shall only refer to one or two more symptoms which were present. He noticed by my directions that he had involuntary spasmodic contractions of the vesiculae seminales, and that the first time following these contractions that he made water, there was a greater turbidness of the urine than at other evacuations. I infer that the afflux of the spermatic fluid was too rapid for the chances of escape which offered, and hence this phenomenon.

The rectum I found swollen, turgescient and hot. I imagine that this condition has much to do with the constipation, not only in this patient, but in all those afflicted with seminal losses. Would not the injection of a solution of nitrate of silver be indicated for this condition, taken *per se*?

I informed the patient of the treatment now generally adopted in these cases—that recommended and practised by M. Lallemand. He eagerly embraced it as being the only resource left him, for he had already exhausted the materia medica, and death was staring him in the face. After subduing the excessive irritability of the urethra which exists in all these patients, by a week's use of the bougie, I introduced the instrument for cauterising and swept the *porte caustique* once slowly over the whole (as near as I could judge) of the prostatic and membranous portions of the canal. I then put him at once upon a strict hygienic course as regarded diet, intercourse with females, and indulgence in erotic thoughts. There was an augmentation of all the symptoms for two or three days following the operation, with a discharge of blood and much pain during micturition, but soon the sky began to clear; the change established by the cauterisation became manifest; constipation disappeared—digestion improved—palpitation ceased—the head cleared—bodily pains vanished—the urine was retained—the virile powers returned—the erections even became

annoying; and in two months' time this young man stood forth regenerated, rejuvenated: to use his own triumphant language—"Richard was himself again!"

A distinguished medical gentleman of this city has kindly permitted me to transcribe from his private memoranda, the following history of one of the most extraordinary cases of which I have any knowledge. The case was that of a young lady of high respectability; and as an example of highly exalted nervous susceptibility, perhaps has no parallel. I abridge the details somewhat, to accommodate them to the prescribed limits of this essay.

Deranged catamenia—Spasmodic muscular contractions—Spinal irritation—Loss of muscular power—Remarkable exaltation of nervous sensibility—Discovery of the cause.

The patient was aged 23. (1842,) of medium size, healthy parentage, finely developed form, system active and rather plethoric, mental faculties healthy and active, and she has experienced deranged health for six years. Suppressed catamenia was the first manifestation of a diseased condition; this continued about three months and terminated in menorrhagia, which was continued, with more or less violence, for about eighteen months. During this time the nervous system began to exhibit symptoms of derangement, and before the menorrhagia ceased, she was seized with spasms in the muscles of the trunk and extremities, accompanied with slight delirium, which left her in a very enervated state; but from which she gradually recovered. These spasmodic attacks usually lasted from ten to twelve hours, occurred at irregular intervals, and seemed dependent upon too much mental or physical exertion. She had much pain during these attacks, chiefly along the spine and in the occipital region of the head.

About eighteen months since she began to complain of increased sensibility of the left side, extending from the occipital region to the upper half of the extremities. This increased sensibility was accompanied by a loss of muscular power in the parts thus affected, which continued to increase for eight months, since which time it has remained stationary, and at this time presents the following very singular phenomenon: the slightest touch of the hand or of any substance whatever, upon any part of the left side affected as before mentioned, caused the most acute pain, with violent tremors. The light contact of a silk handkerchief even, caused her to beg for its removal. But what was most astonishing of all, the sensibility finally increased to such a degree, that the passage of the hand over her back, shoulder and arm, either from the spine forward, or the reverse, and *not in contact* with the skin,—indeed, an inch from it—produced almost as much disturbance in the muscular and nervous

systems, as if the hand had actually been in contact! To test this matter further, she was blind-folded, so as totally to prevent her from perceiving the approach of the hand, yet the same result followed, and under these manipulations the system became so much excited that we were compelled to desist. She described the pain as being sharp and lancinating, following the course of the hand, and continuing only whilst the hand was in proximity to the body. The passage of a conductor or non-conductor of electricity produced equally the same effect.

It was observed that the passage of her own hand over the affected parts produced no effect whatever, being borne without pain. The same was the case with her own clothing after being in contact with her a short time.

More recently the patient had suffered many severe attacks of the spasmodic pain, lasting for several hours, and occasioned principally by mental anxiety concerning the loss, by an apoplectic seizure, of her father. These paroxysms manifested no regularity, either in time or the parts attacked, seizing the hip, the stomach, the uterus, the head, the diaphragm, &c., and seldom more than one at a time. Large doses of morphia and camphor, (three grains of the former to six or eight of the latter,) seemed to diminish the uterine pain, but had little effect upon any other. She has been (at the time of her father's sickness) ninety-six hours without nourishment. Yet during this time she has been not only calm, but cheerful and resigned, and all the time rational. She has now been confined to her bed two years. The attacks of pain seem to wear themselves out, and to cease from a loss of excitability in the sensitive nerves.

This lady had been faithfully attended by an intelligent and sympathising physician, who had treated her, in counsel with several other professional men, for a long time without benefit. The whole catalogue of counter-irritants, alone and in conjunction with constitutional treatment, had availed nothing. Anti-spasmodics, narcotics, purgatives, etc. etc., had shared a like result. The cause and the treatment remained alike a mystery: the symptoms were startlingly palpable.

Subsequent developments disclosed the fact that all this trouble arose from a factitious excitation of the venereal organs, which the patient had long indulged in. The issue of the case remains doubtful.

Now here was a case to intimidate a man. A physician who was not *au fait* in the master passion's romantic indulgences, would legitimately stare, and wonder, and be astounded at such a formidable array of mysterious and unconquerable symptoms. The difficulty of obtaining any disclosures that might betray the secret, in a patient of this kind, enhanced infinitely the obscurity which surrounded the diagnosis.

How are we to explain the very singular phenomenon presented in the

nervous system of this patient? Laying aside animal magnetism, with which I acknowledge no fellowship, it can be explained on no other ground than that of the radiation of caloric—the slightest degrees of which the supernaturally sensitive nerves were enabled to perceive. The brain, being apprised of this approach of a foreign substance, and associating this idea with the manipulations that *had* given pain, it was easy, under these circumstances, for this morbidly educated organ and the nervous system to not only imagine, but actually feel pain. The nervous system might, in this instance, and indeed in all those cases where there is such an exalted state of nervous susceptibility, be compared to a network of wires floating in a thin jelly: not the slightest touch, not a breath of air even, can be communicated to any point of it, but it will be synchronously, and in full force, felt at every extremity of the arrangement; or, perhaps a better illustration will be found in the ear, in the cochlear arrangement of nervous fibrillæ, where the slightest vibratory motions in the atmosphere are so quickly perceived and conveyed to the brain. The degree of intelligence, if I may so speak, of the nervous system of this woman, was certainly astonishing.

As in the other instances, disease was induced in this girl, by the establishment, in the venereal organs, of a point of irritation in the round of the nervous circles. There was no seminal waste, as in the male; therefore the morbid condition of the nervous and muscular systems must have been brought about by the operation of vital sympathies. From the close union which is established between the venereal organs and the medulla spinalis through the medium of the sacral plexus of nerves, it will be easily understood how the irritation is so readily referred from the former organs to the medulla; and how again, through the medium of the excito-motory and sensorial branches which radiate from every point of the column, all those anomalous and most perplexingly obscure symptoms arise throughout the various parts of the body. This law is, I apprehend, universal in all cases of seminal disease; for the convenient arrangement which here exists for the propagation of nervous sympathies, must unavoidably direct our attention to the medulla spinalis for the first *foreign* impression.

The symptoms which characterized this case were so anomalous, so distressing, and so mysterious, as to render them well calculated to awaken not only sympathy, but the most profound scientific curiosity. It will be seen that the diagnosis was, in this instance, every thing.

CUTANEOUS AFFECTIONS are now known to give rise, *by their metastases*, to morbid spermatic discharges, attended with the same disastrous

results to the economy as in the preceding instances. I am again indebted to Lallemand for an illustration of this subject.

Cutaneous affections—Repeated gonorrhœas, &c.—One cauterisation—Cure.

M. N., of a spare habit and irritable constitution, subject to frequent and varied cutaneous affections, had in his youth some temporary gleets that always disappeared very soon. Afterwards he married and remained faithful to his wife.

Yet these discharges reappeared several times, varying in intensity and duration; alternating with darting eruptions more or less acute, sometimes with numerous boils; succeeding, at another time, to an eruption of pimples upon the head, that had lasted a long time and left cicatrices similar to those of small pox. At other periods, obstinate ophthalmias or violent rheumatic pains came on, during the absence of these cutaneous affections.

Several times some slight excoriations became irritated to a troublesome degree, and a simple wound of the leg confined him several months to the bed.

In 1820, in consequence of enormous and numerous boils, there came on an inflammation of the urethra more intense and more painful than usual: I found M. N. in a state of extreme prostration, accompanied with great anxiety, excited by tormenting suspicions as to the nature of that abundant and greenish discharge, in every way similar to that of intense blennorrhagia.

Knowing the constitution of the patient, I thought that this inflammation depended upon the general cause that had given rise to so many others. In fact, it yielded promptly to an antiphlogistic and derivative treatment.

I prescribed afterwards pitans of burdock, of bitter-sweet, &c.: at a later period, the use of the hydro-sulphurous thermal waters. M. N. went successively to Cauterets, Luchon, and Arles, (near Perpignan.)

At the end of three years his general health was improved, but the inflammations of the urethra still appeared from time to time, particularly in winter, when there was no irritation of the skin or other organ. Then he became dejected, restless, changeable, melancholy, and little capable of serious occupation.

He was strongly desirous to rid himself of these periodical discharges that empoisoned his existence. I had already employed, with success, cauterisation in some cases of inveterate blennorrhagia: I proposed the trial of it to him, with the hope of essentially modifying the mucous membrane of the urethra; he submitted to it with eagerness, and the result exceeded my hopes.

For twelve years M. N. has not perceived the least trace of these discouraging gleets, although he has travelled much and has not subjected himself to any particular diet or privations. But he very soon perceived changes much more important.

His venereal desires became more intense, more imperious; the erections assumed a new energy: the ejaculation no longer took place precipitately, as before. He is, at fifty-five, more vigorous than he was at twenty, and capable of doing habitually what he would have regarded then as an excess: this new regimen, far from diminishing his powers, appears to augment them. It is also since that epoch that he has had children.

This single cauterisation, then, produced a real revolution in the genital organs, of which the effects still continue at the end of twelve years.

In order to have a complete idea of the important change that must have taken place in the cauterised membrane, it is well to remark that M. N. has remained exposed to the same cutaneous eruptions, and that they alternate, as formerly, with ophthalmias, attacks of gout, wandering pains in the chest, abdomen, &c.; but that, since then, the urethra has not been a single time the seat of these wandering inflammations, which continue to attack all the other organs.

Thus, although the first cause acts continually upon the rest of the economy, the organ cauterised is found, for twelve years, uninfluenced by it.

What do we observe in this case worthy of particular attention? This man had been the subject of several gleets, as well as frequent and varied cutaneous affections while young. He married, and although continent in his new situation, these gleet discharges recurred at regular intervals, *alternating* with the cutaneous eruptions, until finally, after the subsidence of a more than ordinary severe attack of the phlegmonous eruptions, a violent inflammation of the urethra was established, attended with an abundant greenish discharge, resembling that of gonorrhœa. But there has been no opportunity for a blennorrhagic infection, and there was no other cause discoverable which might be thought instrumental in producing this inflammation and discharge; hence we infer that a transfer of the cutaneous affection was the cause of it.

In this case there had been an enervated condition of the mucous membrane of the urethra established by the repeated gonorrhœas; a predisposition to inflammation existed; and we can easily see, keeping in view the peculiar sympathy which is known to exist here, how, by the operation of cold, slight errors of diet, or other cause, these eruptions of the skin may be transferred, though manifested in a different form, to the genito-urinary membranes.

We see, too, in these metastases, analagous phenomena to those which are exhibited in the determinations of a severe common catarrh. If an individual suffering from catarrh, have debilitated bronchial mucous membranes, a kind of nervous affinity will seem to attract the disease to that part, and a bronchite will supervene; or if he have a weak knee joint, the disease will be invited to spend its force upon that part, and acute rheumatism results. To carry our analogies farther, we see how, by the operation of cold on the external surface of the body, colitis may be established: nature, in endeavoring to throw off by the intestinal canal the suppressed perspiration, first establishes irritation; inflammation follows, and complete dysentery is the result. And we think we see also how certain self-limited, constitutional diseases—measles, scarlatina, small-pox—exercise their agency in the development of latent pre-dispositions to phthisis pulmonalis, strumor, obstinate cutaneous affections, etc. And how malaria impinges first upon the weakest organs of the body—producing in one individual ague, in a second remittent fever, in a third typhus fever, and so on.

The history of this case furnishes us with a striking example of the close and peculiar sympathy which exists between the skin and mucous membranes, more particularly that which exists between the skin of the scrotum and perineum and the urethral membrane; it advertises us of the proneness which cutaneous affections exhibit to change their locality to mucous surfaces, and it admonishes us of the necessity of guarding against these metastases in the treatment of disease.

Diurnal pollutions were provoked by the repeated inflammations which this patient had experienced; and these, being unnoticed and unsuspected by the patient, were the principal causes which operated in the gradual overthrow of his health.

Tinea, herpes, dartres, scabies, may disappear simultaneously with a copulation: there may have been a metastasis of one of these cutaneous affections to the urethral membrane, and an inflammation and a subsequent discharge be the result. Now we have here a practical lesson which it would be well to remember. The patient will think that the coition has been an impure one, let the woman be as free from suspicion as it is possible to be, ay, even if she be a young wife, so strongly are the symp-

toms indicative of a viritic infection; and his physician *may* confirm his unjust suspicions. The fact that there happened simultaneously with this supposed infection a spontaneous disappearance of an herpetic, or other cutaneous affection, has been entirely overlooked by the physician, and he is at once dosed with those very medicines which are calculated to exasperate his disease—copaiba, and the like.

A gentleman who had been a long time annoyed by a prurigo that he thought the itch, had recourse, in order to rid himself of it, to an empiric, who anointed the whole body. Scarcely was he cured, when he brought to a termination an affair of gallantry about which he had been for a long time engaged. Some days afterwards, he had an abundant and greenish discharge, accompanied with pains, and all the symptoms of a violent blennorrhagia. His suspicions were not hastily adopted; he was advised to cover himself with flannel from head to foot: at the end of a few days the vesicles re-appeared, and the discharge subsided of itself.

This case affords us a striking exemplification of the readiness with which these diseases transfer themselves from the slightest cause. It admonishes us in the strongest language, of the circumspection which should be used in establishing a diagnosis in these cases. We must always take into account the circumstances under which these discharges developed themselves, with what facility they have been re-produced, and how they have behaved under the different modes of treatment which have been adopted.

A youth had, at 14, pityriasis of the head: it disappeared at 19, and was replaced by a chronic inflammation of the pulmonary mucous membrane. After the cure of this catarrh. there appeared, without any known cause, a pain at the neck of the bladder, accompanied with itchings, darting pains like to thrusts of a lancet, and weight in the rectum: *then succeeded a gleet*; the spermatic cords became swelled and painful, as well as the testicles, and diurnal pollutions ensued, with all the difficulties consequent thereto.

Here we have a case still more insidious and obscure in its character: no preceding blennorrhagia had been here to indicate a debility of the urethral mucous membrane; no antecedent venereal excesses pointed out our path; there was nothing to enlighten us but the symptoms which we know to characterize diurnal pollutions.

It will be observed then, that we have precisely the same symptoms manifested in these subjects of transferred diseases, as among those whose pollutions originated in contagious urethritis. So that we have the same ultimate effects from one as from the other cause. The irritation must have extended itself in the same manner along the spermatic ducts.

In the treatment of inflammations of the spermatic organs arising from the metastasis of cutaneous affections, the same indications are to be fulfilled as in the previous instances. Cauterisation and the sulphurous waters have been found most efficient. The sovereignty of these remedies are beautifully exemplified in the case of M. N., where it will be seen, that, notwithstanding this patient was still subject to the same cutaneous affections, the same alternations of these with ophthalmias, attacks of gout, wandering pains in the chest, abdomen, &c., the urethra remained permanently invulnerable to the attacks to which it was formerly so obnoxious.

In conclusion, I feel that I cannot enforce too strongly the convictions regarding mal-practice, which the investigation of this subject has developed. After the presentation of these few facts concerning the translation of these diseases, (and many more might have been added,) I say that we cannot be too cautious in pronouncing upon the nature of an urethral discharge attacking an individual hitherto affected with cutaneous disease; more especially if there be already present a debility of these parts from antecedent attacks of blennorrhagia, or from venereal improprieties.

THE RECTUM may be instrumental in the production of seminal fluxes. The causes which operate through this medium are various: the modes in which they operate are diversified. Thus, any cause which will produce pressure upon the prostate gland or vesiculae seminales, will cause to flow out at certain times, the fluids peculiar to those organs;—these causes are principally two: first, habitual constipation, and next, abnormal formations in the rectum, such as tumors, strictures, fistulas, and so on.

Again, an inflammation precisely analogous to that which has been seen to result from blennorrhagia, masturbation, and the metastasis of cutaneous affections, may be propagated to the spermatic organs by continuous and contiguous sympathy from the rectum—the primary or remote cause being located in the rectum. These primary agents are ascariides, hæmorrhoids, dartres, etc.

Now although none of those causes designated as mechanical are likely to operate isolated—independent of any supporting cause, (since we are so apt to believe that irritation and inflammation must always be dependent upon mechanical obstructions,) yet it is possible.

I shall speak first of those causes which are purely mechanical in their nature. All those causes which oppose mechanically the escape of fecal matters, and which favor constipation, will be embraced under this head. I will relate a case for illustration, which came under my own care.

Stricture of the Rectum—Seminal losses resulting therefrom—Great physical and mental prostration—Disposition to commit suicide—Profound hypochondriasis—Division of the stricture—Prompt and complete cure.*

A man came to my father's office one day to obtain medical advice, whose appearance was strongly indicative of an advanced stage of phthisis pulmonalis. Upon interrogating him as to the cause of his prostrated condition, I obtained the following details of his case.

This man had been the subject, about ten years previously, of an accident by which the rectum had been injured to such an extent that a violent inflammation of the part was the consequence. It was treated anti-phlogistically and readily yielded to the remedies applied. Soon afterwards, however, he experienced difficulty in performing the act of defecation; the most laborious efforts were required to perform this act, and the difficulty gradually increased; the feces discharged were small in diameter, somewhat flattened, riband-like; he constantly felt a sense of weight and tension in the sacral region that were peculiarly annoying; constipation proper became profound, and the feces were discharged at longer intervals; the discharge was accomplished with great suffering to the patient, and the globules of feces were observed to be smeared with blood. He was treated at various times with drastic purgatives, but the relief obtained from these was transitory.

From the time that this patient first observed the obstacle to the act of defecation, his health had become progressively more and more deranged; his appetite was diminished; his digestion laborious, protracted, and painfully performed; constant, and at times violent pains in the head; vertigo; when he sat down for awhile and then arose suddenly he would stagger as if drunk; determinations of blood to the head, at times amounting to actual congestion; countenance habitually high-colored and the head hot; he slept but little, for his imagination constantly agitated him with hideous visions of death; he had palpitations of the heart; his desire to urinate was frequent, and the discharge small; by degrees his sexual desires were diminished, and the power of erection lost; the ejaculation was slowly instigated, and the emission protracted; he became restless, peevish and morose—highly nervous and morbidly sensitive to his own complaints; he constantly felt an inclination to commit suicide, which he feared he should carry into execution, and this thought harrassed him more than any other; he shunned society, became averse even to his own friends, sought solitude, and in fine, I found him a profound hypochondriac.

He had been cathartised for his constipation, phlebotomised for his cerebral congestions, and narcotised for his sleeplessness! And he now

* A case much similar to this is related by Lallemand.

declared to me that he had come to seek medical advice for the last time. I confess that I was somewhat intimidated at the formidable physiognomy which this disease presented; but I was at once interested in the case, and determined to establish, if possible, a true diagnosis before proceeding farther: for upon this was based every thing. I was stimulated in my endeavors by the very magnitude of the disease, and by the fact that its true pathology had evaded the acumen of previous observers and remained to be established.

Recollecting the symptoms usually manifested by diurnal pollutions, and comparing them with the symptoms present in this man, there certainly appeared to be an analogy; and connecting this with the constipation, I thought I had sufficient ground-work for interrogating the patient upon this point. But nothing satisfactory was elicited; he had never observed that he passed semen with his urine or during defecation. Still holding to this idea, however, we conjointly made observations for three or four days, and I found that what I had suspected was the fact. I had now ascertained the principal cause of the derangement of his health, and the next thing was to determine the primary cause of the whole difficulty—that which produced the constipation.

All the known remedies for constipation had been used without benefit, not excepting the syringe—a remedy eminently successful under other circumstances. It was therefore useless for me to look to the common causes of constipation for a solution of the difficulty. He told me of his antecedent accident. I was prompted to an examination of the rectum; and introducing my finger, it was interrupted at about half its length by a fibrous band, nearly circular, which projected into the gut. I scarcely need say that I was delighted with the discovery. Examining with care, I found that this stricture had a perforation in the centre into which I could push, with some difficulty, the point of my index finger, and above there was an accumulation of hardened feces, evidently contained in a large cul-de-sac formed by the distension of the rectum, which must have occupied the greater portion of the pelvic cavity.

I at once introduced a probe-pointed bistoury, using my index finger for a director, and made a crucial incision into the constricted part; then throwing in a large injection, the constipation was speedily removed, and there remained nothing to do, but to introduce repeatedly some round object into the rectum to prevent adhesion of the edges of the four flaps of the stricture.

The seminal losses ceased; gradually the powers of life began to resume their wonted energies; the countenance brightened; the cheeks assumed a healthful glow; the brows were no longer contracted and lowering; the limbs regained their vigor; buoyant health took the place

of universal disease; and in a few weeks my grateful patient left me with brightened hopes and a light heart.

To elucidate more clearly the pathology of this case, and the characteristics by which it may be known, let us analyse, briefly, some of the more prominent symptoms which were present, and compare them with the lesions known to exist.

There was a stricture of the rectum, and constipation resulted as a consequence; developing the gastric derangement, the vertigo, the determinations of blood to the head, the flushed countenance;—the mechanical pressure exerted by the accumulated feces upon the prostrate gland and vesiculæ seminales, and the violent efforts required to expel the dejections, produced an undue loss of the fluids of those organs, and hence result the disturbances observed in the nervous system, the mental inquietude, and the loss of virile powers;—the collected feces in the rectum pressed also upon the bladder, and hence we find the patient frequently urinating, and in small quantities;—they pressed upon the spermatic organs, and the emission of semen was retarded during coition.

Now we know that some of these symptoms are not always indicative of the lesions which existed here; but they are sufficiently so to awaken the attention of the observant physician in his inquiries concerning a proper diagnosis. We know also that these different effects cannot be said to stand in an isolated relation to the causes which I have designated as their origin, because the cause and effects of each go hand in hand, observe a regular, simultaneous catenation, and each must sympathise more or less with the other.

In a preponderance of instances where seminal losses follow mechanical obstructions in the rectum, the causes which directly instigate this loss may be regarded as two—the pressure exerted mechanically upon the spermatic organs, and the inflammation of those organs from the irritation which the obstacle induces by continuous and contiguous sympathy from the rectum. In a majority of instances, I say, this fact holds, but in the foregoing case it does not. The symptoms did not indicate, specifically, an inflammation of the spermatic organs; they were nothing more than might occur from simple waste of semen from mechanical pressure, and were, at the same time, adequate to produce all the effects observed. This case proves, therefore, what I have insisted upon a few pages back: that simple mechanical obstruction, unattended with irritative inflammation, is adequate to produce seminal losses that may compromise the health and the life of the individual.

An interesting fact now presents itself for consideration: the reciprocal influence which the genito-urinary organs exert upon the rectum when these organs have become inflamed. We will see how an inflammation

of the spermatie organs, when once established, may, in turn, induce a condition of the rectum which is equally pernicious to the health of the patient; showing, in a striking manner, the close sympathy which binds together these several organs.

A soldier of light infantry, passionately fond of wine, had good health with the exception of a few gonorrhœas, until he was thirty years of age, when, one day, being under the influence of wine, and covered with sweat, he entered the water up to his middle, and then left his clothes to dry upon him. Some time afterwards he experienced an acute pain in the lumbar region, a sense of weight in the hypogastrium, a more frequent desire to urinate, and some difficulty in voiding the urine. All this produced much general debility, especially a weakness of the legs, which induced him to become a tailor. He had worked at his trade but a short time, when he perceived he passed semen without erection or pleasure. These pollutions became more and more common, *and were accompanied with a frequent and irresistible desire to go to stool*: it was with great difficulty that the urine was passed, and that only after very fatiguing efforts. His general health went on deteriorating for the next three years, and we now find him with a still more frequent desire to go to stool; the presence of the fecal matters in the rectum produces a painful impression, that causes their involuntary expulsion. The urine passes off every ten or fifteen minutes, without the patient being conscious of it; it contains an abundant sediment of a greenish white appearance, flocculent at the surface, and is very readily decomposed. No venereal desires; not the least appearance of erections. The inferior extremities are so feeble, that they cannot support the weight of the body. The legs are the seat of osteocopic pains, and the feet are constantly cold. The patient appears indifferent to every thing. (*Lallemand*.)

I have cited this case to show the reciprocal influence which the genito-urinary organs may exert on the rectum, and it is a beautiful illustration of that fact. It gives us an illustration of the influence which cold may exert in the production of seminal discharges.* This man went into the water under circumstances calculated to do him injury, and a chronic cystitis has been seen to have been the result; this inflammation subsequently extended itself first to the vesiculæ seminales and then to the rectum. The patient was intemperate, and while under the influence of stimulating drinks, had been in the habit of exposing himself much to cold; and it is easy to see why, in this case, the cold should have acted on the bladder, since his intemperate habits must have pre-disposed this organ to it. Cold, indeed, is capable of producing seminal discharges

* I had intended to introduce this subject—the influence of cold—in a more prominent form into this essay, but this brief reference to it must suffice.

under other and dissimilar circumstances, but I cannot go into details here. I merely mention it, *en passant*, because the physician should be on his guard against a cause of disease so deceptive.

There are a few points of interest in the preceding case which I cannot pass over without a more extended notice. The high degree of susceptibility which the rectum attained in the march of this inflammation, is a point worthy of remark. It could not bear for a moment the presence of the fecal matters, but as soon as they arrived on a level with the bladder, convulsive contractions of the muscular coat was instigated, and they were immediately expelled, even contrary to the patient's will. The stools were not retained long enough in the rectum to become liquid—they were hastily discharged, mixed with the mucosities of the intestinal canal above, as in diarrhoeal discharges. So likewise of the urine and semen: these were also discharged, as has been seen, as soon as a small quantity was collected in their respective receptacles; the stimulant influence which they exerted upon the tender, inflamed surfaces, determining their expulsion in a badly elaborated condition.

This case teaches us the dependency which exists between all these organs, and of the necessity of contrasting the different phenomena which each manifests in disease, if we wish to get a clear understanding of them. This influence of the genito-urinary organs upon the rectum is constant: it is present in health, it is present in disease; and he deceives himself who thinks it of rare occurrence.

Equestrian exercise is capable of producing seminal losses, by the obstinate constipation of which it is well known often to be the cause. An example will illustrate this point. Lallemand mentions in detail, the following case: A young man who had been placed at college at the age of 16, soon learned to practice digital manipulations, but discovering its injurious effects, discontinued it before any serious general disturbance of his health took place. After he had grown up, he was in the habit of riding much on horseback, superintending his estates, and for other purposes. Constipation troubled him much, which he attributed to his equestrian exercise; and for two or three years he experienced a gradual decline in his general health. He felt a numbness and formication in his feet and legs; his erections became more and more rare, less energetic, and finally incomplete; his intellect was obscure, diminished; he had frequent and severe cerebral congestions; the countenance became habitually high-colored and the head hot; an almost constant pain became seated about the orbits; his character became restless and peevish. About this time, without a proper regard for his physical imbecility, a marriage was projected between himself and a charming young lady who resided in the country a considerable distance from the city where the

young man lived. In order to visit her frequently and superintend his estates at the same time, he was necessarily obliged to occupy much of his time on horseback; indeed, as his nuptials approached he passed most of his time in this way, and his costiveness now became profound: he even went forty days without a stool! His urine was slowly emitted, and with it he passed large quantities of semen. His prostration of health, his cerebral congestions, had now become dangerous and alarming, but yet the marriage ceremony was celebrated at the appointed time. Things stood in rather an awkward position between the happy pair. All intercourse was impossible, owing to the physical prostration of the patient; his mortification and alarm augmented all his troubles; the cerebral and other symptoms began to wear a more serious aspect: the two families were very properly alarmed at his condition, and deemed it advisable to seek other medical advice than that which he had previously relied on. With this view, ten days after marriage, he sought, in charge of his wife and her mother, the advice of M. Lallemand, to whom they applied for *a cure of the cerebral congestions*: this they thought to be the whole difficulty, and for this had he been treated by his former medical advisers. (Ascending douches, vegetable regimen, iced milk; after a month, cauterisation, water dashes, cure.)

What are the great features of this case? Evidently these, that constipation is capable of determining seminal losses; and that equestrian exercise is adequate to the production of constipation. From other minor facts detailed in this case, which I have omitted, there was nothing in his history which would, by any possibility, point to any other cause for the production of these seminal losses than the constipation, and I might add a slight pre-disposition to take on inflammation which may have existed in the mucous membrane of the urethra from the antecedent habit of masturbating; a circumstance, however, which could not have had much influence, for the habit was discontinued before any serious lesion of that organ could have taken place. Do not the facts presented by this case, establish an interesting and important principle in pathology?

This case proves, moreover, a fact which I have often observed, and which must have been noticed by almost all country practitioners: that constant riding on horseback will establish the most profound constipation. I have observed it in my own person, and in others in so palpable a manner, that there could be no doubt about it. The mode in which this influence is exerted, is, I think, of easy explanation. The nates are brought into close juxtaposition by the manner in which the individual is seated upon the saddle, and the constant pressure which is thus exerted upon the sphincter ani and the rectum, produces a mechanical constriction of the parts, and constipation results. The cause is, therefore, primarily and

essentially, mechanical: its ultimate results, as has been seen, sympathetic, vital.

The great father of medicine, Hippocrates, was not slow to notice the influence which constantly riding on horseback exerted upon an individual. It will be remembered that it was to this cause that he attributed the well-known impotence of the Scythians; a fact which was so notorious as to make it a peculiar characteristic of that people. The opinion of Hippocrates could not, of course, have been based upon our present knowledge of pathology: the remote cause and its ultimate effects were palpable to him—the *modus operandi* obscure.

Fissures of the anus may be mentioned as one of the rectal causes which operate in the production of seminal discharges. A medical student who had been for some time troubled with an obstinate constipation, lacerated, one day, in his violent efforts at defecation, the mucous membrane lining the sphincters. The pain which now accompanied each attempt at defecation was so distressing that he delayed this act as long as possible, and then the retained and hardened feces only tended to increase the fissures. He had had gonorrhœa with swelled testicle; and now diurnal pollutions supervened, as a result of the combined influence of the constipation and the inflammatory action of the fissures. (Cathartics for two weeks, cicatrisation of the ruptures, cessation of the spermorrhœa, cure.)

Hemorrhoids and *anal dartres* are causes capable of producing diurnal pollutions. I have met with several cases on record where these causes, more particularly the former, have proved to be the primary exciting causes. After what has been already said concerning the intimate sympathy which exists between the pelvic organs, the readiness with which disease is propagated from one to the other, and the almost absolute dependency of each upon the other for the preservation of its individual integrity, the manner in which hemorrhoids exert their influence will be at once obvious. Irritation, inflammation, in the rectum; then a travelling to the spermatic organs, where an attack is first made upon the mucous tissues of those parts; soon the whole are involved in the inflammation, a lesion of function follows, and thus we have spermorrhœa established, with all its deplorable train of evils. The symptoms which characterize this condition are quite analogous to those which flow from the sequelæ of blennorrhagia, masturbation, etc. And moreover, hemorrhoids are apt to be attended with tumors of greater or lesser magnitude, prolapsed anus, and so on; and these concomitants, it is apparent, will go far to swell the danger of a transmigration to contiguous parts, by means of their mechanical irritation.

I am under the impression that seminal losses are not as rare an atten-

dant upon hemorrhoids as is supposed. I can recollect more than one case which has come under my own notice, where, from the appearances and symptoms indicated, I should now certainly be prompted to carry my investigations farther than the simple hemorrhoidal affection; and with a certain assurance of discovering something beyond which would account, more properly, for the peculiar symptoms which are sometimes exhibited by these patients.

Ascarides in the rectum are known to be a prolific cause of seminal losses; prolific, speaking comparatively. This may, at first sight, appear to be a strange cause, but it is, nevertheless, one of considerable importance. It is well known that there is scarcely an organ or tissue of our bodies that is not occasionally desecrated by the intrusion of some one of the numerous parasitic tribes that make their homes either within or without our persons. Each tribe has its favorite hiding-place; thus one species of *strongle* chooses the heart for its domicile, another the arteries, a third the kidneys. The *guinea-worm* and the *chigoe* bore through the skin and nestle in the subjacent cellular tissue. The tissue which connects the fibres of the voluntary muscles contains myriads of them. *Hydatids* are found principally in the liver and brain. Even the gall-bladder, and the eye, have their living inhabitants. In the intestinal canal they are found most troublesome, because they are the largest, and are more capable of doing injury. Independently of the minute scientific divisions into genera and species, there are other grand distinctions, in which some are designated as external, some internal, and some I shall call *amphibious*. Of this latter class—the *ascaris vermicularis*—I intend to speak. The favorite *habitat* of these animals is the rectum, and I call them amphibious, because they are not unfrequently found without the verge of the anus and vulva; and because, moreover, they sometimes migrate—performing journeys by land, to find their way into the vagina and even the urethra of the male.

It can be easily understood how these animals tend to the production of seminal discharges. They act as a constant excitant to the genital organs, producing in the young, in whom they are the most frequently found, precocious desires which are uncontrollable, and which exercise the worst tendency. Thus you will see quite young boys tormented with erections that can be attributed to no other cause. Girls of the most tender age are not exempt, and these little parasites will be found not only in the rectum, but within the vulva, producing a degree of titillation there that is exceedingly pernicious, not only in a physical, but in a moral light. In a male youth, masturbation is almost certain to follow the presence of these little worms; in the female, the same result, with copious leucorrhœa, irresistible itchings of the genital organs, redness and

excoriation of the nymphæ, clitoris, etc. This is a familiar subject, however, to practitioners, and I need not therefore pursue it further.

I would gladly introduce here some cases of thrilling interest, in illustration of this condition, but am positively restricted by the want of room. Cases are on record where individuals have been harrassed with these worms for years, in whom the final result was precisely similar to that of the former cases—seminal losses were determined: in this case they are determined either by masturbation or irritation from contiguous sympathy. Sufficient has already been said concerning the sympathies which exist between the pelvic organs, and the manner in which those sympathies are propagated, to render any further illustration superfluous. The insignificance of the cause and the magnitude of the effect, must strike the ordinary reader with wonder, and the professional man with shame, that a cause so trifling should be overlooked. The therapeutic indications are obvious.

With these remarks I take leave of the *causes* and *symptoms* which characterize seminal losses.

TREATMENT.—I shall not dwell long upon the treatment of seminal losses. My object has been rather to define the pathology of the disease, than to indulge in speculations regarding curative means; for I cannot be supposed to possess that intimate knowledge of the properties of remedies which my seniors do.

Ample experience has, I think, established the process of M. Lallemand as being the most efficient, and indeed, the only reliable remedy in use. Before his time, tonics, balsamics, baths, strict hygiene, etc., were the remedies employed, and the treatment was attended with very indifferent success. The *Porte Caustique* of Lallemand, with the modern modifications, has obtained universal favor in this country, and I believe in Europe also. The mode of using this instrument is no longer a novelty to physicians, and I shall add nothing on this point.

It is perfectly astonishing to me that one application of the caustic, lightly swept over the parts, should produce such instantaneous and astounding remedial effects. Its *methodus medendi*, is, I apprehend, not readily appreciable. Some change is obviously brought about in the vital endowments of the part—a change which at once restores its healthy functions. We can judge somewhat of its effects, perhaps, by analogy. Thus, when nitrate of silver is applied to fungous injected and engorged tissues, especially of a serofulous character, (the results of inflammation,) or to those chronic inflammations of the vagina and neck of the uterus that induce so many leucorrhœas, or to chronic catarrhs of the bladder and bronchial mucous membrane, it promptly and *permanently*

modifies the condition of these several parts. It seldom excites either pain or inflammation. "When applied to mucous membranes, a similar white compound of the nitrate with the animal matter of the secreted mucous is formed, and this defends the living tissue from the action of the caustic, so that the effects are not so violent as might be expected." (*Pereira, Mat. Med.*, vol. i., p. 582.) Soon after the application of the caustic, the tissue becomes disengorged, contracts upon itself, becomes pale, and a new energy is infused, whose action, I infer, is entirely vital, and independent of any merely contractile or chemical agency; and hence this mode of cure, not only in spermatitis, but in the other inflammations spoken of, proves so permanently remedial, and so little liable to relapses. We may therefore conclude that nitrate of silver operates upon these inflamed and irritable tissues by essentially modifying their organization and sensibility; thus establishing a change in their vital endowments, by which a source of irritation to the whole nervous system is removed, and the entire economy is enabled to take on a condition of health.

Physicians have been much in the habit, owing to the cachectic and atonic appearances, of administering the ferruginous and other tonics, cold baths, balsamics, sulphurous baths, ice, etc., because these remedies most certainly appear to be indicated, and they are astonished at their want of success. Like mercury prescribed for syphilitic persons who are nervously irritable, or antimony preceding venesection in acute thoracic inflammations, or balsam copaiba in the acute stage of urethritis, no benefit is received, and indeed harm may result. An irritable state of the system, or of a part, accompanying disease, contra-indicates, I believe, as a general rule, the employment of those very remedies which are generally serviceable after the irritability shall have been removed. Thus after the cauterisation of the irritable urethra for seminal discharges, we find nothing so salutary as those very tonics, baths, and so on, referred to above, in restoring the tone of the organs, and in building up the broken down constitution of the patient. And yet we know that they serve but to enhance the irritability of the system, if they are employed before that irritability shall have been allayed by cauterisation.

There is in all these patients an astonishing degree of susceptibility in the membranous, prostatic, and sphincter portions of the canal. The most cautious catheterism will cause acute pains and spasmodic contractions, violent enough in some instances, to resemble the resistance of strictures. It appears to the patient as if the bougie was passing over parts that are denuded; it is a cutting, burning sensation, and is felt much more intensely as the point of the instrument penetrates the sphincter. It is a curious fact, and one worth remembering, that at this moment

many persons fall into a state of syncope. It will be apparent therefore to the practitioner, that the bougie should be used for some days preceding the operation, in order to inure the urethra to the presence of a foreign body, and thus not only prevent the spasmodic seizure of the bulb of the *porte caustique* by the sphincter, but guard against other inconveniences which might arise.

Not unfrequently the urine will still remain more or less muddy after the operation, although the greater proportion of the losses may have been commanded. Under these circumstances, sulphurous baths, ice, or hot and cold dashes to the perineum, will be found adequate to complete the cure. These remedies would have been found worse than useless before the irritation had been allayed by the cauterisation; but now they are eminently curative. I think the cold dash applied to the perineum two or three times daily would prove most efficient.

Objections have been urged, not alone by patients, but even physicians have shared their apprehensions, that the direct application of caustic to the orifices of the ejaculatory ducts, must of necessity produce impotence, by the occlusion or complete obliteration of these orifices. I have only to say that these fears have never been entertained by those who have had experience in the use of the remedy. Cauterisation, when properly performed, is emphatically a *curative* process—not a *destructive* one.

IN CONCLUSION, let me ask, what are the great difficulties which physicians experience in the way of diagnosing spermorrhœa? And what are the duties of the profession regarding this disease?

The question *quid negotii est?* must be the starting point in the investigation of all diseases; and it has therefore been my endeavor, as I stated before, rather to point out the symptoms and causes of the disease, as it is presented to us in its multiplicity of forms, than to indulge in speculations regarding the therapeia.

The obstacles which physicians have to contend with in ascertaining the true nature of the disease, arise from various causes. In the first place, the symptoms approximate very closely to those which characterize a variety of nervous affections; secondly, in many instances the true character of the disease is not suspected by the patient himself, thus leading him to suppose that the abnormal condition, whatever it may be, of the genital organs, is the sequence, not the cause of the other symptoms; thirdly, the patient not unfrequently deceives the physician designedly, through shame, hoping at the same time that the remedies prescribed, may, perchance, be of service to him.

Thus it will be seen that M. de S. and his friends were convinced that he was laboring under cerebral disease; his physicians shared the same opinion, and I must admit that there was every apparent indication for blood-letting and a general anti-phlogistic treatment. But when light was thrown on the subject, the fallacy, nay, positive perniciousness of this course, was rendered palpable. C. C., during a period of three years, before he came under my notice, had been treated for not less than seven diseases, and by as many physicians—each one drawing afresh upon our bountiful nosology. The case of the young lady was still more shrouded in obscurity and perplexity, for we have no reason to believe that she even suspected the cause of her difficulty herself; and it was certainly a case well calculated to baffle the best directed efforts of the medical men who saw her. In fine, all the cases which have been introduced into this paper, and indeed, all the cases of which I have ever read, were more or less obscure and calculated to deceive. ✓

The brain is always involved to a greater or lesser extent—in some instances, as has been seen, amounting to congestions of a serious character, epilepsy, melancholia bordering on insanity, etc. The chylopoietic viscera, and the whole tract of the intestinal canal, are invariably implicated, and to no small extent, in this difficulty; and hence so many of these persons are supposed to be primarily affected with dyspepsia. I am inclined to think from what I have observed of the effects of sudden transitions from excessive venereal indulgences to strict continence, and vice versa, upon the condition of the alimentary canal, that there is a more intimate sympathetic connection between the venereal organs and this canal, than is generally conceded. The alimentary canal is known to wield a powerful sympathetic influence over the rest of the economy by means of its extensive nervous communications; and this fact has led to some magnificent errors in pathology; for what but a knowledge of this powerful influence could have induced the giant mind of Broussais to believe that all fevers originated in this canal? To continue, the liver alone sometimes gives out indications that induces the practitioner to refer the difficulty to that organ. Professional dignity is often provoked into a smile to witness the accommodating manner in which the poor liver is made the scape-goat of half the organs in the body; being placed in the front rank to shield its more fortunate fellow-organs behind from the blue-pill cannonading which is innocently discharged at it. Again, there is universally present a lumbar pain, and not unfrequently pain along the whole tract of the spinal column, and so the *pix burgundica* is called into requisition—"Sherman's poor man's plasters" are vigorously plied, *ad infinitum*. I think I have observed also in these patients a peculiar proneness of the mucous surfaces of the larynx, trachea, and larger bronchii,

to sympathize with the disease of the mucous surfaces of the genito-urinary organs. There is certainly an improvement in the tone of voice, and a decreased liability to pulmonary catarrhal affections, after cauterisation for spermorrhœa; and this change is so prompt that I am inclined to attribute it rather to sympathetic action than to the general altered condition of the system. There are other prominent appearances present in this disease calculated to throw the medical man into a wrong train of inquiry, but my limits will not permit me to enter into farther detail.

There is, however, in all these patients, in the very manner in which they enter the physician's presence, in the eyes, in the voice, attitude, and countenance, something timid and bashful, that no language can exactly describe, but which the observant physician will soon learn to distinguish. Address is required to get at the secret. The confidence of the patient must first be secured, and in order to do this, he must be impressed with the belief that the physician feels a lively interest in his welfare,—beyond mere dollars and cents; once convinced that the physician is his friend, there is an easy access to his secret.

Post-mortem examinations of those individuals who die of spermorrhœa, generally exhibit lesions of sufficient magnitude in other organs to be thought adequate to the death of the individual, and no notice is therefore taken of the spermatie organs. For this reason the pathological anatomy of this particular disease, has, no doubt, been retarded; and the barrenness of our pathology, and the obscurity which surrounds the subject, may be attributed to this fact. But few autopsies have ever been made with a view of detecting primary disease in the spermatie organs; but in every instance where examinations have been made upon those individuals who have died with unequivocal symptoms of spermatie disease, the most extensive disorganization of these organs has been found.

The simple lesion of the spermatie organs, *per se*, is not certainly capable of compromising life, for persons of both sexes may lose the essential organs of generation with perfect impunity, as far as regards hazard to the integrity of the constitution; it is the destructive influence which is propagated from these organs to remote and more vital parts through the medium of the nervous system, that does the work of death. But when we come to examine the nerves themselves, we are compelled involuntarily to ask ourselves—how is it that these tender, delicate cords are capable of transmitting so much disease—of being the couriers of death from one organ to another—of being encompassed about by diseased tissues of every character, at their origins, terminations, and along their course, and yet remain, so far as the eye can detect, invincible to this extensive morbid influence? Who shall say *how* this influence is diffused abroad through the nerves from this one isolated spot, so as to

produce such extensive functional and structural lesion of the brain, the medulla spinalis, the heart, the stomach, and so on? And this serves well as a type of the whole catalogue of nervous diseases. What are the writings of the illustrious Marshall Hall and the whole host of writers upon nervous pathology worth to us so long as they do not explain to us how this influence is exerted? The marvellous and often fatal effects of mind over body, in the acquisition, continuance or cure of abnormal conditions of the system, is one of the unexplained, and, I fear, inexplicable phenomena which is daily occurring in the nervous system to astound and overwhelm us with surprise. How are we to account for the frolicsome vagaries of an intermittent fever, yielding to medicines the very antipodes of each other, to the charm of the wizard and to fright? An illustrative fact or two may be mentioned: A man afflicted with ague for a long time, and who was in the habit of watching the clock regularly to anticipate the recurrence of his paroxysm, was cured by a friend having set the clock back until the time was passed by; he was soon afterwards informed of it, but the paroxysm did not occur for that time; and the morbid catenation being once broken, the disease was cured. A distinguished gentleman of this city who had suffered intensely from tic douloureux for a number of years, and had tried various remedies without any benefit, was induced one day by a student to attend the lectures of Professor Mott, in the University of New York, on that subject. He sat comparatively unconcerned while Dr. M. passed in review the various modes of medicinal treatment: for with these he was acquainted. But when the lecturer came to the surgical treatment, and gave an exhibition upon the dead subject of the various steps of the operation, the gentleman evidently became very uneasy, and presently losing all power of sustaining himself, he swooned away; when he recovered his senses, he found himself at the door of the University, in the street, supported by his friend. From that time to this, now four or five years, he has had no recurrence of the neuralgic affection! A violent cerebral excitement wrought a change in the condition of the affected nerves at that point where the irritation originated, perhaps; but our limited knowledge of the habits of the nervous system throws no light upon the subject, upon which we can rely. Can any one say why, when a woman first conceives, and the womb takes on itself a new function, neuralgia about the lower jaw, cheek and neck, sometimes supervenes, as the result of this change in the system? or why the testicle swells in parotitis? or ascarides in the rectum produces itching of the nose? or the pain of morbus coxarius is felt in the sound knee? or a punctured wound of the bottom of the foot produces trismus? or why chancreous ulceration of the penis is attended with enlargement of the contiguous

glands—constituting bubo; or why, in like manner, ulceration of the glands of Peyer are attended with enlargement of the pancreatic gland? These are but a few of the manifestations of this mysterious and unaccountable operation of nervous sympathies, and how limited must our knowledge be when we cannot even essay an opinion, predicated upon correct data, as to their mode of manifestation!

The brain, as the centre of the nervous system, sits enthroned upon her proud pinnacle, enshrouded in her secret panoply—the conservator and guardian of the actions of the economy—herself mysterious and unknown. When we look at the various organs of the body, we cannot but admire their nice adaptation to the functions which they severally perform; and we cannot be mistaken about the mode in which that function is performed. Thus, any tyro in anatomy must know by their conformation and location that the lungs are the organs of respiration, the stomach of digestion, the liver of the elaboration of bile, the kidneys of the secretion of urine, the heart the organ of the circulation; but who will say that there is an analogy between the conformation of the brain and its radiating appendages, and the functions which they perform? There is none; and we can only know some of the laws which govern them by cause and effect—by direct experiment.

We are unquestionably upon the threshold of a mighty and astonishing advancement in our knowledge of the pathology of the nervous system. There are, however, certain boundaries beyond which inquirers cannot go in their investigations of nature's peculiarities; but we should not lay down a certain limit because there appears something beyond which looks impenetrable, and not within the cognizance of human eye; for these nervous diseases form so large a proportion of the maladies which affect the human frame, and are of such universal interest to the professional man, that not only duty, but inclination should urge him on to an elucidation of all that is possible concerning them.¹

Returning to the subject properly under consideration, let me ask, what are the duties of the profession regarding this disease?

Philanthropy, a desire to relieve human suffering, and a zealous interest in the advancement of science, should enlist the medical man in the condition of these unfortunate victims. The world is full of suffering; civilized mankind is an embodiment, physically speaking, of miserable infirmity; morally speaking, nothing less. Natural depravity, inherent pre-dispositions, favored by unhappy adventitious circumstances, developes unconsciously a behemothian, health-destroying, mind-destroying, demoralizing disease, which, like a foul ulcer, spreads out its long, tortuous, insidious, insinuating ramifications into every pore of the body politic,—there committing its ravages incognito, deceiving all by its protein quali-

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